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New or little known Chinese *Mythimna* (Lepidoptera, Noctuidae)

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Abstract The neotype of *Mythimna* (*Dysaletia*) *sigma* (Draudt), comb. nov. is shown for the first time with descriptions of the male and female genitalia. The female of *Mythimna* (*Mythimna*) *albostriata* Hreblay and Yoshimatsu is illustrated for the first time with description of the female genitalia. A new species, *Mythimna* (*Mythimna*) *communis*, is described from China.

Key words Lepidoptera, Noctuidae, *Mythimna*, China.

Introduction

Although the neotype of *Dysaletia sigma* (Draudt) was designated in Hreblay *et al*. (1998), it was not illustrated and only the characteristics of the cucullus were mentioned in brief. *Mythimna* (*Hyphilare*) *albostriata* Hreblay and Yoshimatsu was described as a new species in the same journal, but the female was not shown and the female genitalia were not described. Therefore they are described in this paper. A new species, *Mythimna* (*Mythimna*) *communis*, which is superficially similar to *Dysaletia sigma* (Draudt), is described from China on the basis of the male holotype. The generic and subgeneric treatments of the *Mythimna* (*s. l.*) group follow Yoshimatsu (1994) in this paper.

Abbreviation. MAK: Museum Alexandor Koenig, Bonn, Germany.

Descriptions

Mythimna (*Dysaletia*) *sigma* (Draudt), **comb. nov.** (Figs 1, 2, 5, 6)

Cirphis sigma Draudt, 1950, *Mitt. münch. ent. Ges.* **40**: 53.
Leucania sigma: Poole, 1989, *in* Heppner, *Lepid. Cat*. (New Ser.) **118**: 586.
Dysaletia sigma: Hreblay, Legrain and Yoshimatsu, 1998, *Esperiana* **6**: 414.

Length of forewing. Male 15 mm. Female 16 mm.

Male genitalia (Fig. 5). Vinculum slender in lateral view; saccus moderately large. Valva except cucullus with rounded ventral margin and acutely produced posteriorly; costa weakly waved; editum represented by a small process which bears hairs; ampulla moderately long and large with rounded bulged apical portion; sacculus moderately broad; harpe moderately long and broad, dorsal process of harpe small and egg-shaped; valvula broad and long with narrow membranous area; cucullus small with an acute process ventroposteriorly, without coronal spines and its basal arm moderately long and thick. Juxta as in Fig. 5C. Phallus with long slender plates on left dorsolateral and ventrolateral portions continuing from the suprazonal sheath; vesica moderately long, about 1.8 times as long as aedeagus when everted, bearing dense spinules on almost entire surface besides basal portion, a band of short spines on distal portion and a long stout spine and long slender spines at distal end.

Female genitalia (Fig. 6). Seventh abdominal tergum and sternum unmodified. Eighth

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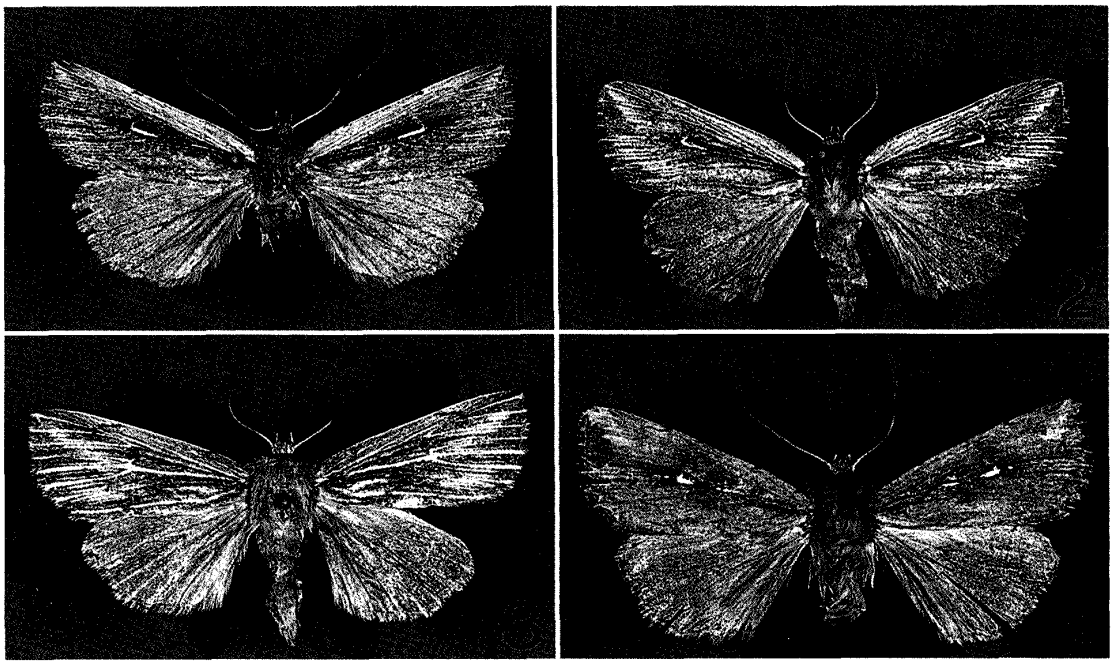

Figs 1–4. Adults of *Mythimna* spp. 1. *M*. (*Dysaletia*) *sigma* (Draudt), comb. nov., neotype ♂. 2. *M*. (*Dysaletia*) *sigma* (Draudt), comb. nov., ♀. 3. *M*. (*Mythimna*) *albostriata* Hreblay & Yoshimatsu, paratype ♀. 4. *M*. (*Mythimna*) *communis* sp. nov., holotype ♂.

abdominal tergum unmodified; apophysis anterioris moderately long. Ductus bursae sclerotized, curved dorsally before antrum, with many longitudinal striae; ostium bursae unmodified. Ductus seminalis short. Corpus bursae oval and membranous; cervix bursae short and membranous with sclerotized dorsal and right lateral portions. Papilla analis unmodified; apophysis posterioris moderately long.

Specimens examined. ♂ (neotype), Li-kiang *ca* 3,000 m, Prov. Nord-Yuennan, 15. vi. 1935, H. Höne; 1 ♀, Li-kiang *ca* 2,000 m, Prov. Nord-Yuennan, 3. vii. 1934, H. Höne.

Distribution. China.

Remarks. A pair of the types of *Cirphis sigma* are lost. As the moths of the genus *Mythimna sensu* Yoshimatsu (1994) are usually similar to one another externally, the neotype of this species was designated in the interests of stability of nomenclature in Hreblay *et al*. (1998). For example, *Mythimna communis* sp. n., which is similar to this species, is described as a new species in the following lines as a result of the stability of nomenclature achieved by the designation of the neotype. Although the type localities of the lost types and the neotype are different, the original description is almost identical to the neotype. Therefore I believe the designation of the neotype of *M. sigma* is valid under the code. The male genitalia of the neotype are broken partially; uncus, tegumen and right valva except for sacculus are missing and left valva is nearly cut at the middle as shown in Fig. 5. This is the second species of the subgenus *Dysaletia* of the genus *Mythimna*. It is interesting that *M. sigma* is lacking the coronal spines on the cucullus.

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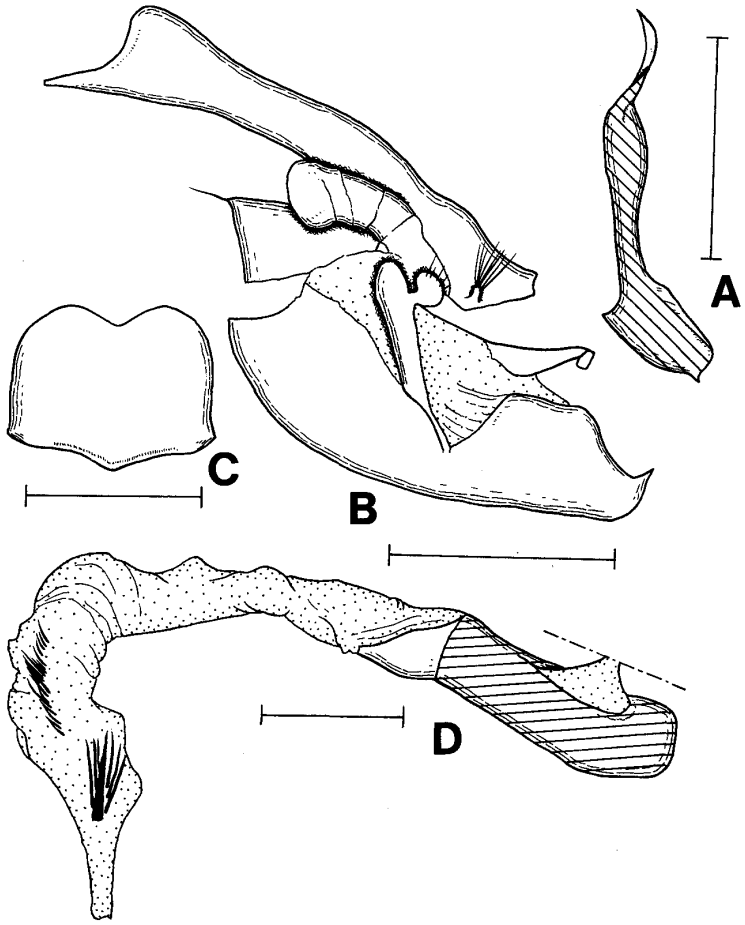

Fig. 5. Male genitalia of *Mythimna* (*Dysaletia*) *sigma* (Draudt), comb. nov. A: Vinculum and saccus. B: Left valva in inner view. C: Juxta. D: Phallus in dorsolateral view. Scales 1 mm for A, B, D, 0.5 mm for C.

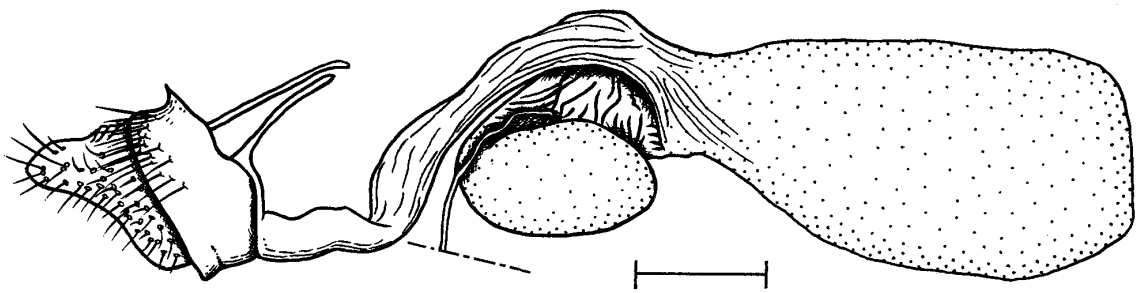

Fig. 6. Female genitalia of *Mythimna* (*Dysaletia*) *sigma* (Draudt), comb. nov., lateral view. Scale 1 mm.

Mythimna* (*Mythimna*) *albostriata Hreblay and Yoshimatsu (Figs 3, 7)

Mythimna (*Hyphilare*) *albostriata* Hreblay and Yoshimatsu, 1998, *in* Hreblay, Legrain and Yoshimatsu, *Esperiana* **6**: 393–394, figs 59, 60, pl. 35.

Length of forewing. Female 17 mm.

Female genitalia (Fig. 7). Seventh abdominal tergum and sternum unmodified. Eighth

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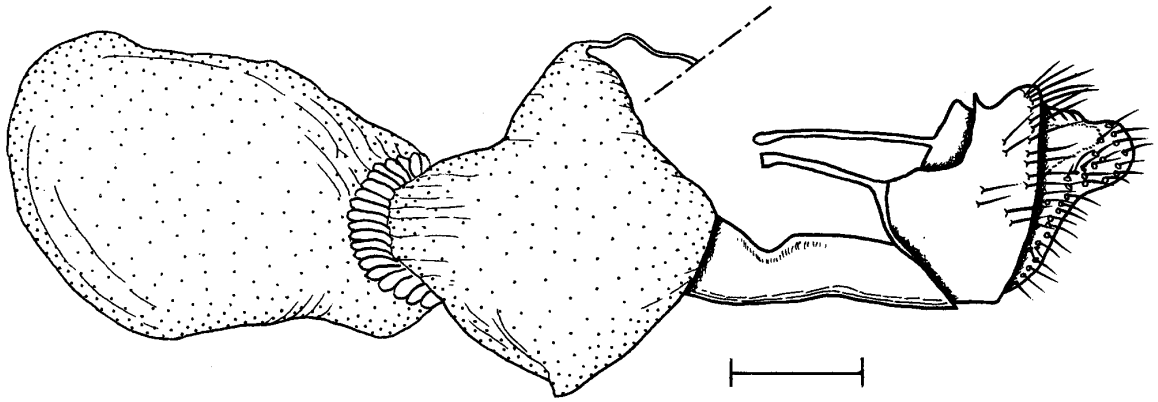

Fig. 7. Female genitalia of *Mythimna* (*Mythimna*) *albostriata* Hreblay & Yoshimatsu, lateral view. Scale 1 mm.

abdominal tergum unmodified; apophysis anterioris moderately long. Ductus bursae sclerotized and slightly curved before antrum; ostium bursae oblique in lateral view. Ductus seminalis moderately long. Corpus bursae oval; cervix bursae almost spindle-shaped and membranous, with a caterpillar wheel-like, sclerotized band distally. Papilla analis unmodified; apophysis posterioris moderately long.

Specimen examined. 1 ♀ (paratype), Ost Tien-mu-shan, Prov. Chekiang, 22. v. 1931, Höne.

Distribution. China.

Remarks. This species was described on the basis of two male and one female specimens.

***Mythimna* (*Mythimna*) *communis* sp. nov.** (Figs 4, 8)

Length of forewing. Male 17 mm.

Male. Frons ochreous, tinged with brown; vertex ochreous brown, mixed with fuscous scales. Thorax ochreous brown; tegula ochreous brown with fuscous outer sides. Abdomen ochreous, tinged with brown. Forewing ochreous brown; basal spot fuscous; a black streak from the base to below the half of median nervure; antemedial line indistinct; a short white streak on the central portion of median nervure ending in a prominent white spot, slightly hooked distally with a black spot proximally, beyond which the ground colour is fuscous; orbicular and reniform ochreous brown with fuscous surroundings; postmedial line strongly serrate and fuscous; a fuscous triangular shade from termen below apex; terminal line represented by black spots on interspaces; cilia ochreous, chequered with fuscous brown. Underside of forewing ochreous brown; a fuscous postmedial line; terminal line represented by black spots on interspaces; cilia fuscous brown. Hindwing fuscous brown; terminal line indistinct; cilia ochreous with a fuscous transverse band in the middle. Underside of hindwing pale ochreous; costal and outer area thickly irrorated with fuscous; a large fuscous discoidal spot; a fuscous postmedial line; terminal line represented by black spots on interspaces; cilia ochreous, chequered with fuscous brown.

Male genitalia (Fig. 8). Tegumen moderately broad in lateral view; vinculum produced posteriorly on the central portion with broad lateral fold; saccus moderately large. Uncus slender, slightly long and falcate with hairs beyond the middle. Valva except cucullus with strongly bulged valvula; costa gradually curved; editum moderately large with many long

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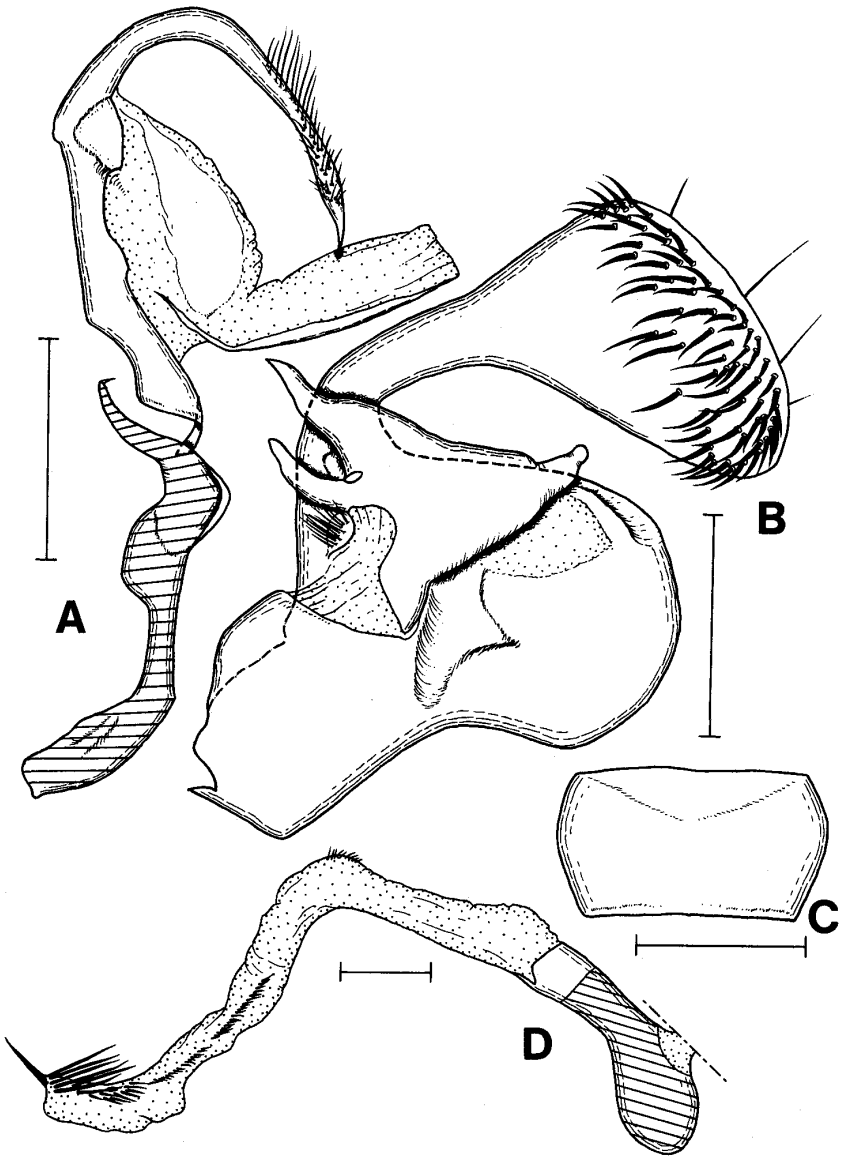

Fig. 8. Male genitalia of *Mythimna* (*Mythimna*) *communis* sp. nov. A: Ring in lateral view. B: Right valva in inner view. C: Juxta. D: Phallus in lateral view. Scales 1 mm for A, B, D, 0.5 mm for C.

hairs; ampulla moderately long, fused with harpe basally, and tapering; sacculus moderately large and its dorsal margin raised dorsally; harpe broad with two processes, dorsal process of harpe moderately long and curved; valvula broad and long vertically with vertically long broad membranous area; cucullus very large, rounded bulged ventrally with many diffused coronal spines, and its basal arm moderately long and strongly curved ventrally. Juxta as in Fig. 8C. Phallus unmodified; vesica slightly long, about 2.4 times as long as aedeagus when everted, bearing dense spinules on entire surface of distal 3/4, an isolated cluster of short spines at basal 1/3, irregular rows of short spines beginning at the half and extending near distal end, long slender spines and a long stout spine at distal end.

Female. Unknown.

Holotype. ♂, Li-kiang *ca* 2,000 m, Prov. Nord-Yuennan, 5. ix. 1934, H. Höne.

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Type depository. MAK, Bonn.

Distribution. China.

Remarks. Although this species is externally similar to *Mythimna* (*Dysaletia*) *sigma* (Draudt), the male genitalia are close to those of *Mythimna* (*Mythimna*) *sinuosa* (Moore).

Acknowledgements

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摘　　要

中国産 *Mythimna* 属の新種および稀な種の記載 (鱗翅目, ヤガ科) (吉松慎一)

Hreblay *et al*. (1998) の中で, *Dysaletia sigma* (Draudt) のネオタイプが指定されたが, その成虫は図示されず, また, 交尾器についても雄の cucullus の形状が簡単に述べられたにすぎなかった. 同じ論文中で *Mythimna* (*Hyphilare*) *albostriata* Hreblay and Yoshimatsu は新種として記載されたが, 雌については記載されなかった. 前者は紛失した一対のタイプ標本を含めてもこれまで2♂2♀のみが知られる稀な種で, また後者は2♂1♀のみしか知られていない稀な種である. これら2種の記載とともに, 今回は中国からさらにキヨトウ類の1新種, *Mythimna* (*Mythimna*) *communis* の記載をした. 使用した標本は全て独ボンの MAK 博物館の Höne コレクションから借用したものである.

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